## Amendments to and Listing of the Claims:

Please amend claim 23 as shown and please add new claims 28-31 such that the pending claims read as follows:

Claim 1. (previously presented). A melamine ring-containing co-polymer of formula (I)

wherein m is an integer of 1 to 100;

R<sup>1</sup> is independently selected from an alkyl group having one to twenty carbon atoms;

R<sup>2</sup> is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R<sup>3</sup> is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

 $R^4$  is independently selected from  $-C_pH_{2p}OH$ ;  $-C_pH_{2p-1}OH$ ;  $-C_pH_{2p-2}OH$ , wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R<sup>5</sup> is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):

and;

n is an integer of one to thirty;

wherein the melamine ring-containing co-polymer is the reaction product of at least one melamine base resin and at least one reactant compound, wherein the at least one reactant compound comprises a cashew nut shell liquid and has at least one functional group selected from a carboxyl group, a hydroxyl group, a thiol group and combinations thereof.

Claim 2. (previously presented). The co-polymer of claim 1, wherein the cashew nut shell liquid comprises cardanol and cardol.

Claim 3. (previously presented). The co-polymer of claim 1, wherein the at least one reactant compound further comprises a fatty acid.

Claim 4. (previously presented). The co-polymer of claim 1, wherein the at least one reactant compound further comprises at least one compound selected from the group consisting of lauric acid, myristic acid, palmitic acid, stearic acid, arachidic acid, palmitoleic acid, oleic acid, ricinoleic acid, linoleic acid, arachidonic acid and combinations thereof.

Claim 5. (previously presented). The co-polymer of claim 1, wherein the at least one reactant compound further comprises at least one compound which is selected from the group

consisting of dodecyl mercaptan, phenyl mercaptan, lauryl thioglycolate, octyl thioglycolate, and mixtures thereof.

Claim 6. (previously presented). The co-polymer of claim 1, wherein the at least one base melamine resin is modified or unmodified and is selected from the group consisting of a melamine resin, a melamine-formaldehyde resin, a melamine-urea-formaldehyde resin, a urea-formaldehyde resin and combinations thereof.

Claim 7. (original). A melamine ring-containing co-polymer of formula (I):

$$R^{3} = R^{1} - O_{R^{1} R^{2} R^{3}}$$

$$R^{2} - R^{1} - O_{R^{1} R^{2} R^{3}}$$

$$R^{3} - R^{2} - R^{1} - O_{R^{1} R^{2} R^{3}}$$

$$R^{3} - R^{2} - R^{1} - O_{R^{1} R^{2} R^{3}}$$

$$R^{4} - O_{R^{1} R^{3} R^{2} R^{1} - O_{R^{1} R^{3} R^{3} R^{3}}$$

$$R^{2} - R^{3} - R$$

wherein m is an integer of 1 to 100;

R<sup>1</sup> is independently selected from an alkyl group having one to twenty carbon atoms;

R<sup>2</sup> is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R<sup>3</sup> is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

 $R^4$  is independently selected from  $-C_pH_{2p}OH$ ;  $-C_pH_{2p-1}OH$ ;  $-C_pH_{2p-2}OH$ , wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; and an alkynyl group;

R<sup>5</sup> is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):

$$H_2CO$$
 $R^7$ 
 $OCH_2$ 
(III)

and;

n is an integer of one to thirty.

Claim 8. (original). The co-polymer of claim 7, wherein R<sup>1</sup> is independently selected from a group having two to seven carbon atoms.

Claim 9. (original). The co-polymer of claim 7, wherein at least one of R<sup>3</sup> is independently selected from a group having thirty to sixty carbon atoms.

Claim 10. (original). The co-polymer of claim 7, wherein at least one of  $R^3$  is independently selected from a group having six to twelve carbon atoms.

Claim 11. (original). The co-polymer of claim 7, wherein at least one R<sup>3</sup> is a structure represented by the formula (II):

wherein R<sup>6</sup> is independently selected from an alkyl group, an allyl group, and an alkynyl group having ten to forty carbon atoms.

Claim 12. (original). The polymer of claim 11, wherein R<sup>6</sup> is a group having fifteen to thirty carbon atoms.

Claim 13. (previously presented). The co-polymer of claim 11, wherein  $R^6$  is a group selected from -(CH<sub>2</sub>)<sub>7</sub>CH = CH-(CH<sub>2</sub>)<sub>5</sub>CH<sub>3</sub>; -(CH<sub>2</sub>)<sub>7</sub>CH = CHCH<sub>2</sub>CH = CH(CH<sub>2</sub>)<sub>2</sub>CH<sub>3</sub>; -(CH<sub>2</sub>)<sub>7</sub>CH = CHCH<sub>2</sub>CH = CHCH<sub>2</sub>CH=CH<sub>2</sub>; and -(CH<sub>2</sub>)<sub>14</sub>CH<sub>3</sub>.

Claim 14. (previously presented). A method of preparing a melamine ring-containing copolymer comprising reacting at least one melamine base resin with at least one reactant
compound wherein the reactant compound comprises cashew nut shell liquid and has at least one
functional group selected from a carboxyl group, a hydroxyl group, a thiol group and
combinations thereof, wherein the copolymer has formula (I):

wherein m is an integer of 1 to 100;

R<sup>1</sup> is independently selected from an alkyl group having one to twenty carbon atoms;

R<sup>2</sup> is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R<sup>3</sup> is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

 $R^4$  is independently selected from  $-C_pH_{2p}OH$ ;  $-C_pH_{2p-1}OH$ ;  $-C_pH_{2p-2}OH$ , wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R<sup>5</sup> is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):

$$H_2CO$$
 $R^7$ 
 $OCH_2$ 
(III)

and;

n is an integer of one to thirty.

Claim 15. (original). The method of claim 14, wherein the reaction is carried out in the presence of a proton-donating catalyst.

Claim 16. (original). The method of claim 15, wherein the catalyst is a sulfo radical containing catalyst.

Claim 17. (previously presented). The method of claim 15, wherein the catalyst is selected from the group consisting of methanesulfonic acid, phosphoric acid, nitric acid, oxalic acid, maleic acid, hexamic acid, phthalic acid, acrylic acid, para-toluene sulfonic acid, dinonyl naphthalene sulfonic acid, magnesium bromide, zinc nitrate, aluminum nitrate, magnesium nitrate and combinations thereof.

Claim 18. (previously presented). The method of claim 14, wherein the at least one reactant compound comprises cardol and cardanol.

Claim 19. (previously presented). The method of claim 14, wherein the at least one reactant compound comprises a fatty acid.

Claim 20. (previously presented). The method of claim 14, wherein the at least one reactant compound comprises a compound which is selected from the group consisting of lauric acid, myristic acid, palmitic acid, stearic acid, arachidic acid, palmitoleic acid, oleic acid, ricinoleic acid, linoleic acid, arachidonic acid and combinations thereof.

Claim 21. (previously presented). The method of claim 14, wherein the at least one base melamine resin is modified or unmodified and is selected from the group consisting of a melamine resin, a melamine-formaldehyde resin, a melamine-urea-formaldehyde resin, a urea-formaldehyde resin and combinations thereof.

Claim 22. (original). A surface having a coating, wherein the coating comprises a melamine ring-containing co-polymer having the structure of formula (I):

$$R^{2} = R^{1} - O_{R^{1}}$$

$$R^{2} - R^{1} - O_{R^{1}}$$

$$R^{3} - R^{2} - R^{1} - O_{R^{1}}$$

$$R^{4} - O_{R^{1}}$$

$$R^{2} - R^{3}$$

$$R^{2} - R^{3} - R^{2} - R^{1} - O_{R^{1}}$$

$$R^{2} - R^{3} - R^{2} - R^{3} - O_{R^{1}}$$

$$R^{2} - R^{3} - C_{R^{1}}$$

$$R^{3} - R^{2} - R^{3} - C_{R^{1}}$$

$$R^{4} - O_{R^{1}}$$

$$R^{2} - R^{3} - C_{R^{1}}$$

$$R^{3} - R^{2} - R^{3} - C_{R^{1}}$$

$$R^{4} - O_{R^{1}}$$

$$R^{2} - R^{3} - C_{R^{1}}$$

$$R^{3} - R^{2} - R^{3} - C_{R^{1}}$$

$$R^{4} - C_{R^{1}}$$

$$R^{2} - C_{R^{1}}$$

$$R^{3} - C_{R^{1}}$$

$$R^{4} - C_{R^$$

wherein m is an integer of 1 to 100;

R<sup>1</sup> is independently selected from an alkyl group having one to twenty carbon atoms;

R<sup>2</sup> is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R<sup>3</sup> is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

 $R^4$  is independently selected from  $-C_pH_{2p}OH$ ;  $-C_pH_{2p-1}OH$ ;  $-C_pH_{2p-2}OH$ , wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R<sup>5</sup> is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):

$$H_2CO$$
 $R^7$ 
 $OCH_2$ 
(III)

and;

n is an integer of one to thirty.

Claim 23. (currently amended). A melamine ring containing co-polymer that is a reaction product of a cashew nut shell liquid and at least one melamine-formaldehyde resin wherein the cashew nutshell liquid comprises cardanol and cardol[[;]], and wherein the cardanol is present in an amount ranging from about 80% to about 100% by weight of the cashew nut shell liquid and the cardol is present in an amount ranging from about 1% to about 20% by weight of the cashew nut shell liquid.

Claim 24. (previously presented). The melamine ring containing co-polymer of claim 23, wherein the reaction is carried out in the presence of a proton-donating catalyst.

Claim 25. (previously presented). The melamine ring containing co-polymer of claim 23, wherein the at least one melamine resin comprises a methylated melamine formaldehyde resin.

Claim 26. (previously presented). The method of claim 23, wherein the cashew nutshell liquid is in the form of a cashew nut shell liquid distillate.

Claim 27. (previously presented). The copolymer of claim 1, wherein the at least one base melamine resin is a methylated-formaldehyde resin.

Claim 28. (new). The melamine ring containing co-polymer of claim 1, wherein the cashew nutshell liquid comprises cardanol and cardol, and wherein the cardanol is present in an amount ranging from about 80% to about 100% by weight of the cashew nut shell liquid and the cardol is

present in an amount ranging from about 1% to about 20% by weight of the cashew nut shell liquid.

Claim 29. (new). The melamine ring containing co-polymer of Claim 28 that is a reaction product of a cashew nut shell liquid and at least one melamine-formaldehyde resin, wherein the cashew nutshell liquid comprises cardanol and cardol, and wherein the cardanol is present in an amount ranging from about 96% to about 98% by weight of the cashew nut shell liquid and the cardol is present in an amount ranging from about 2% to about 4% by weight of the cashew nut shell liquid.

Claim 30. (new). A melamine ring containing co-polymer that is a reaction product of a cashew nut shell liquid and at least one melamine-formaldehyde resin, wherein the cashew nutshell liquid comprises cardanol and cardol, and wherein the cardanol is present in an amount ranging from about 96% to about 98% by weight of the cashew nut shell liquid and the cardol is present in an amount ranging from about 2% to about 4% by weight of the cashew nut shell liquid.

Claim 31. (new). The melamine ring containing co-polymer of claim 30 wherein the co-polymer has formula (I):

wherein m is an integer of 1 to 100;

R<sup>1</sup> is independently selected from an alkyl group having one to twenty carbon atoms;

R<sup>2</sup> is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R<sup>3</sup> is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

 $R^4$  is independently selected from  $-C_pH_{2p}OH$ ;  $-C_pH_{2p-1}OH$ ;  $-C_pH_{2p-2}OH$ , wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R<sup>5</sup> is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):

and;

n is an integer of one to thirty;

wherein the melamine ring-containing co-polymer is the reaction product of at least one melamine base resin and at least one reactant compound, wherein the at least one reactant compound comprises a cashew nut shell liquid and has at least one functional group selected from a carboxyl group, a hydroxyl group, a thiol group and combinations thereof.